

**METHOD AND APPARATUS FOR INTELLIGENT  
MANAGEMENT OF A NETWORK ELEMENT**

**ABSTRACT**

5           A network element (NE) includes an intelligent interface (II) with its own operating environment rendering it active during the NE boot process, and with separate intelligence allowing it to take actions on the NE prior to, during, and after the boot process. The combination of independent operation and increased intelligence provides enhanced management opportunities to enable the NE to be controlled throughout the boot process and after completion  
10 of the boot process. For example, files may be uploaded to the NE before or during the boot process to restart the NE from a new software image. The II allows this downloading process to occur in parallel on multiple NEs from a centralized storage resource. Diagnostic checks may be run on the NE, and files, and MIB information, and other data may be transmitted from the II to enable a network manager to more effectively manage the NE.

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